

**Have you ever thought about what it would have been like to be at Kitty Hawk, North Carolina, on December 17, 1903, to see the historic first flight of the Wright Brothers? Now you have the chance to go back in time and see a working replica of their aircraft!**

Wright Redux & Packer Engineering built a flight-worthy reproduction of the Wright Brothers' 1903 Flyer. Its final flight took place at Clow Airport, Bolingbrook, IL on October 14, 2003. The plane will be donated to the Museum of Science and Industry in Chicago. A dedication ceremony will take place on Dec 17, 2003, the anniversary of the first powered flight, and eventually the Flyer will be put on permanent display.

To commemorate the 100<sup>th</sup> anniversary of the first flight, four separate groups, including NASA, attempted to build working replicas of the original



In December 2002, they installed a test engine, propellers, chains, and tubes on the plane. In January 2003, they held the initial flight-testing of the plane with a pilot. This lift test showed the aircraft's ability to fly. On March 15, 2003, FAA agents evaluated this replica aircraft and certified it as "Serial # 2."



aircraft. One of the four groups, The Wright Redux Association of Glen Ellyn, IL, joined forces with Packer Engineering, Inc. and a large group of volunteer companies to produce a replica of the Wright's original aircraft and gasoline engine.

No accurate engineering drawings of the original engine existed, so Packer's staff converted the Smithsonian drawings into 3-D computer models and used them to construct a full-size foam engine-block core. They then poured molten aluminum into a mold containing the foam core. The foam dissolved leaving the cast aluminum engine block.

The Wright Brothers' Flyer reproduction was built solely with volunteer labor and monetary donations. Over 40 companies\* donated their time and services. Dr. Packer calls the Flyer project an example of grass roots "mid-western Volunteerism". The spirit of synergy developed among the companies involved truly created both an aircraft and an ideal, much greater than any one group could have managed on their own.



Photo by Nataliya Dauksha

\*Bison Gear of St. Charles, IL, Insight Automated, Inc. of Glendale Heights, IL, Peterson Spring of Southfield, MI, American Foundry Society of Des Plaines, IL, Wheatland Machine of Naperville, IL, Beery Heating and Cooling of Oswego, IL, Jerry's Welding of West Chicago, IL, NAPCO Steel, Inc. of West Chicago, IL, Ed Meyers of Bolingbrook, IL, MTI Inc. of Rockford, IL, The Arnold Engineering Co. of Marengo, IL, The Austin Group of Quincy, IL, Willard Industries of Cincinnati, OH, Arrow Gear of Downers Grove, IL, Craftsman Tool & Mold of Aurora, IL, Bison Electric of Elgin, IL, TRW of Danville, PA, Phoenix Electric Mfg. of Chicago, IL, Scot Inc. of Downers Grove, IL, Auto Machine Inc. of St. Charles, IL, and Packer Technologies International of Warrenville, IL, The Western Society of Engineers, Buhrke Industries of Arlington Heights, IL, Kohlert MFG. Co. of St. Charles, IL, Research Automation, Inc. of Aurora, IL, Advantage Machining of Aurora, IL, ONDEO Nalco Co. of Naperville, IL, Gingler-Lowney Laser of Aurora, IL, Pro Mold & Die of Roselle, IL, Video Impressions of Aurora, IL, Wisconsin Precision of East Troy, WI, Express Pattern of Buffalo Grove, IL, Jim Packer of Aurora IL, and DuPage Blueprint of Glen Ellyn, IL.